

S U M M A R Y

The invention relates to a method for identifying the presence of BBB-specific protein/fragment in endothelial cells of brain capillaries, characterized in that a) endothelial cells
5 of brain capillaries freshly isolated from brain are conventionally pre-purified by enzymatic digestion, b) the digest obtained in step a) is treated with a lysis buffer that essentially destroys present erythrocytes and apoptotic cells and maintains at least 70% of the endothelial cells of brain
10 capillaries in vital form, c) the product obtained in step b) is optionally purified further, d) a subtractive cDNA library is prepared from the endothelial cells of brain capillaries and a subtractive tissue, e) a cDNA subtraction is performed using one ore more differential hybridization(s), f) clones
15 from the subtractive cDNA library are verified by differential hybridization with respect to their respective expression, g) a complete cDNA sequence is prepared for the BBB-specific clones from the subtractive cDNA library, and h) the expression pattern of the investigated clones is compared be-
20 tween fresh and cultured endothelial cells of brain capillaries and, that way, the presence of BBB-specific proteins or fragments thereof is identified as well as proteins and fragments thereof identified with this method.